Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims

Claim 1 (original).

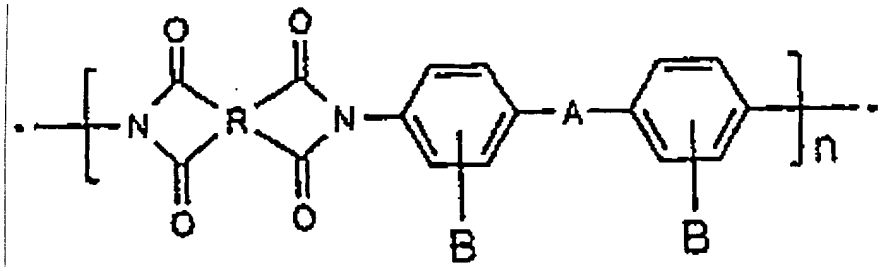
A nanocomposite, wherein said composite is formed of modified polyhedral oligomeric silsesquioxane (POSS) and polyimide through covalent bonding, and are a self-assembled system with low dielectric constant and certain mechanical properties.

Claim 2 (original).

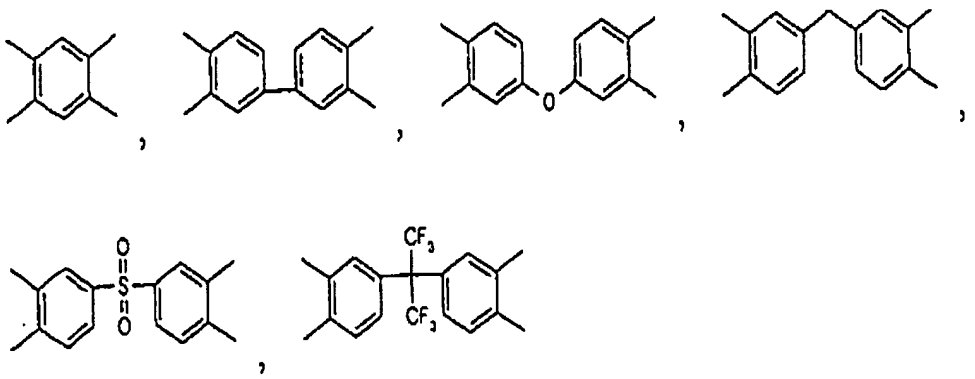
The nanocomposite according to Claim 1, wherein the polyhedral oligomeric silsesquioxane is of reactive functional group, which is typically represented by chemical formula $(SiO_{1.5})_nR_{n-1}R'$, wherein n=6, 8, 10, 12, R is alkyl having 1 to 6 carbon atoms or phenyl, R' is $-R_1-B$; R_1 is alkyl having 1 to 6 carbon atoms or phenyl, and B is selected from group at least consisting $-NH_2$, -OH, -Cl, -Br, -I, or other derivatives having diamine group ($2NH_2$), for example, reactive functional groups as $-R_1-N(-Ar-NH_2)_2$, $-R_1-O-Ar-CH(-Ar-NH_2)_2$ and the like.

Claim 3 (original).

The nanocomposite according to Claim 1, wherein the polyimide typically has polymerization units represented by following formula:



wherein R is



wherein A is -O-, -S-, $-CH_2-$, $C(CH_3)_2$, or $C(CF_3)_2$ and the like; B is -H, -OH, or $-NH_2$.

Claim 4 (original).

The nanocomposite according to Claim 1, wherein the dielectric constant of said composite is reduced to 2.3.

Claims 5 to 10 (cancelled).